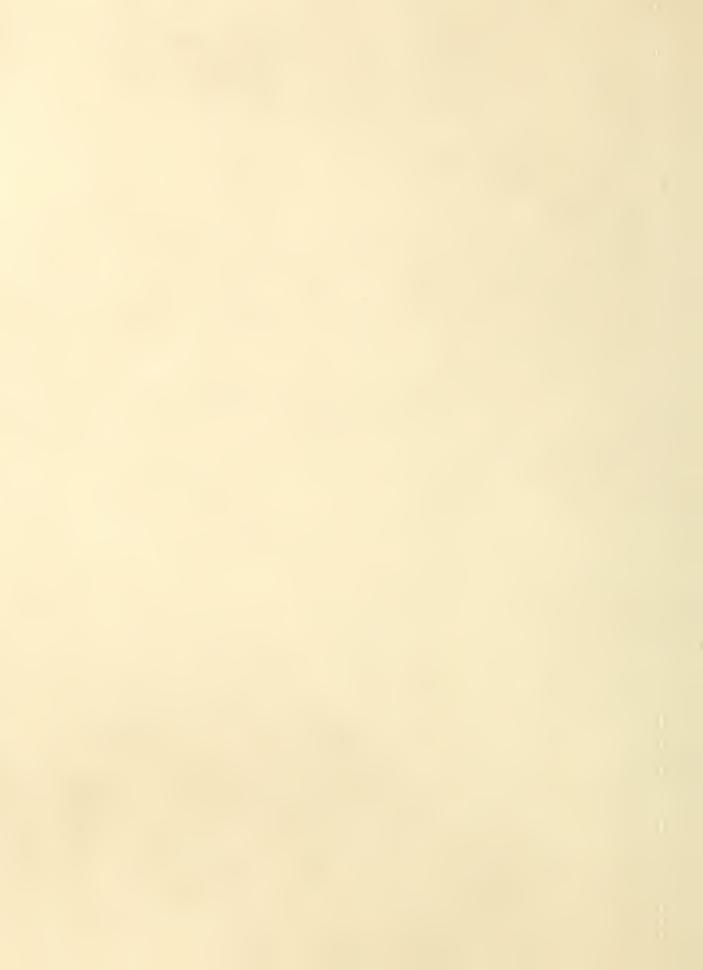
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Federal-State Cooperative
Snow Surveys and Water Supply Forecasts
for

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ts NOV 9 1956 +

Rio Grande Drainage Basin

SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
AND
COLORADO AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, National Park Service, State Engineers of Colorado and New Mexico and other Federal, State and local organizations.

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UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

Forecasts by U. S. Weather Bureau of total annual streamflow October-September, inclusive, at more than 300 gaging stations are issued monthly January through May in the publication WATER SUPPLY FORECASTS FOR THE WESTERN UNITED STATES.

Weather Bureau forecasts of runoff presented in that bulletin are computed from procedures based on mathematical analysis of the relation between precipitation and runoff.

The Weather Bureau bulletins may be secured by writing to:

Hydrologist in Charge River Forecast Center U. S. Weather Bureau 712 Federal Office Building Kansas City 6, Missouri

For current information on local river and flood conditions, reference should be made to the appropriate River District Office listed below:

Weather Bureau Airport Station Rio Grande and tributaries Albuquerque, N. Mex.

Meteorologist in Charge..............Pecos River in N. Mex.; at and above Elephant Butte Dam, N. Mex.

Rio Grande

FEDERAL-STATE COOPERATIVE

SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

RIO GRANDE BASIN

Issued

February 10, 1955

Report Prepared By
Homer J. Stockwell, Snow Survey Leader
and
Jack N. Washichek, Assistant Snow Survey Leader

Soil Conservation Service and Colorado Agricultural Experiment Station Fort Collins, Colorado

Issued By

Kenneth W. Chalmers State Conservationist Soil Conservation Service

John S. Erickson State Engineer of New Mexico Santa Fe, New Mexico

General Series Paper No, 595 Colorado Agricultural Experiment Station

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WATER CONTENT OF SNOW ON THE WATERSHEDS OF PLATTE, ARKANSAS, UPPER COLORADO AND RIO GRANDE BASINS BASED ON SNOW SURVEYS MADE APPROXIMATELY FIRST DAY OF MONTH

In Percent of Normal February 1, 1955 M G NORTH GREEN PLATTE YAMPA 110 80 70 SOUTH WHITE PLATTE 900 75 UPPER COLORADO 80 90 ck. Gurnison R Α Gunnison GUNNISON & DOLORES RIO GRANDE -65 50 ARKANSAS SAN JUAN 60 6 conejos 60 30 50 CANADIAN PE COS



WATER SUPPLY OUTLOOK

RIO GRANDE DRAINAGE BASIN February 10, 1955

Another year of deficient streamflow is in prospect for the Rio Grande and its tributaries. Water supply will again be poor in New Mexico. Snow cover along the Continental Divide in Colorado is about 60 percent of normal. Elsewhere on the watershed snow accumulation to February 1 is 25 to 50 percent of the past ten-year average. Soils in irrigated areas are dry. Reservoir storage is much below normal, slightly less than for February 1, 1954.

RIO GRANDE

The water supply outlook for the Rio Grande in Colorado is similar to that for the past five years except 1952. Snow cover is now about 60 percent of normal along the Continental Divide in Colorado. In New Mexico and on the Sangre de Cristo range seasonal snow accumulation has been light. Most measurements of water content show only 2 or 3 inches, 25 to 50 percent of the long time average. The most probable flow of the Rio Grande, Alamosa and Conejos rivers into San Luis Valley will be about three-quarters of normal for 1955. This is based on average snowfall for the remainder of the season. This flow estimates exceed to some extent the actual river flow in 1953 and 1954. Storage in irrigation reservoirs in San Luis Valley is low. It is close to the amount of water stored a year ago and less than half of the past ten-year average. Soils are dry in the valley.

The water supply outlook for the Rio Grande in New Mexico is poor again this year. On the Rio Chama and Rio Grande watersheds in northern New Mexico mountain soils are dry and snow cover to date is extremely short. El Vado Reservoir is empty. Another year of limited water supply for the Middle Rio Grande is indicated.

The water available in Elephant Butte and Caballo reservoirs is now about 150,000 acre-feet. This is practically the same as a year ago. Inflow to Elephant Butte is expected to be a little more in 1955 than for last year. The total of storage and expected inflow will probably not be more than one-half of the historical water demand. Extensive pumping will again be necessary.

There is very little snow on the headwaters of the Pecos. However, due to the flood on the Pecos River last fall, storage in Alamogordo and McMillan reservoirs is five times that of February 1, 1954 and nearly twice the past ten-year average. The water supply outlook for the Carlsbad Project is good.

Carry-over storage in Conchas Reservoir for the Tucumcari Project is 145,000 acre-feet as compared to 170,000 a year ago and about one-half of the past ten-year average. Soils are dry and streamflow is below normal. There will probably be a deficiency in water available for irrigation in 1955.

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SNOW SURVEYS AND IRRIGATION WATER FORECASTS RIO GRANDE BASIN

STATUS OF RESERVOIR STORAGE, February 1, 1955

STREAM	RESERVOIR	USABLE CAPACITY 1000 A.F.	THOUS. Abo	ANDS OF A ut Feb. 1 1954	CRE FEET	IN STORAGE 10-year Ave. 1943-1952
RIO GRANDE	Rio Grande Santa Maria Sanchez Terrace Continental Platoro Elephant Butte Caballo	45.0 45.0 103.0 17.7 26.7 60.0 2273.7 365.0	4.7 2.4 3.5 2.9 4.0 0.0 122.4 18.9	4.7 2.1 2.9 1.2 4.0 0.0 128.6 15.9	15.3 9.4 4.8 4.6 4.5 0.0 355.0 81.8	11.8 8.6 10.4 2.5 8.7 * 776.0 197.6
CHAMA RIVER	El Vado	226.0	0.0	0.0	8.2	62.5
CANADIAN RIVER	Conchas	600.0	144.9	167.9	75.7	306.0
PECOS RIVER	Alamogordo McMillan-Avalon	148.0 45.0	79°2 37°6	11.0 5.1	30.0 2.5	53.2 12.2

^{*}Some for shorter periods,

SHOW SURVEY AND SHIP AND STORY OF HOLE

BEL 18 of GERRAL ENGINEER, SOFTWOOD IN LESS

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	E TO THE STATE OF				Sincip ii Dire. Arisi Briti Shera E Nor Asch Groteli Sheli down ii	
The second	175° -411 541	4,4	2.6-	N. 2005	et, 20 % .	
\$1. X.		0,134	Salink.	A STAR	Carrelle =	7
	English State	(), [%], (%	\$ 0.7 0.10 1.10		สมาชิง ครั้ง การจับ ครั้งได้	

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SNOW SURVEYS AND IRRIGATION WATER FORECASTS for RIO GRANDE BASIN February 1, 1955

SUBMARY OF FEBRUARY 1 SNOW SURVEYS AND COMPARISON OF DATA WITH THAT OF PREVIOUS YEARS BY WATERSHEDS

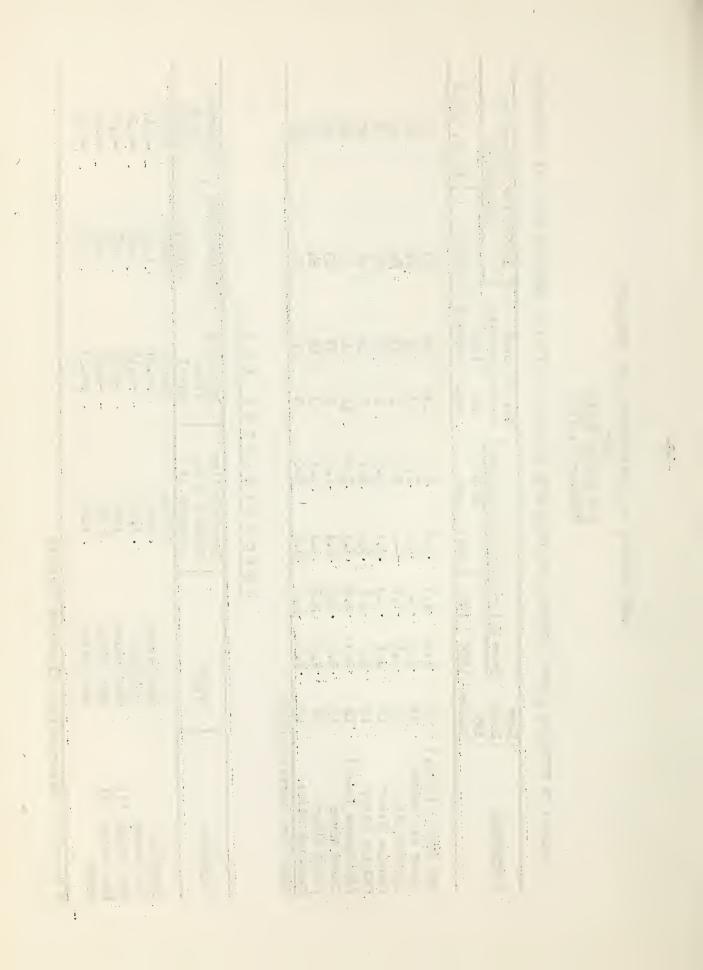
	Snow					No. of	Snow	1955 Water	1955 Water Content in
WATERSHEDS	Depth	Snow 1	Vater Co	ontent i	Snow Water Content in Inches	courses	courses Density	perc	percent of
	1955 Inches	1955	1957	1953	16 yro*	in	1955 percent	195/1	16 vr. Avg.*
							1		
Rio Grande (Colo.)	21	4.4	0°9	6.8	8.0	13	21	73	55
Upper Rio Grande	23	ኢኖ	7°0	707	7.7	m	23	92	69
Alamosa River	22	7.	5,7	1	7.8	2	23	86	65
Conejos River	18	7	4.9	9.1	9°5	2	25	92	747
Culebra River	13	ع،۲	7,8	5,6	6.7	႕	77	38	27
Rio Grande (N.M.)	זו	2.3	3.9	5,1	5°0	7	ನ	59	917
Chama River	15	3.4	5.4	8,1	7.9	N	23	63	43
Pecos River	0	1.6	2°2	3.1	307	m	18	† ₉	43
Canadian River	12	2.5	4.2	7° 7	5,0	3	な	09	50
*Some for shorter periods	peri ods								

le for shorter periods

PRECIPITATION DATA

		Precipitation	Departure	Precipitation	Departure
WATERSHED	STATE	October 1 to	from		from
		January 31	Normal	January	Normal
		Inches	Inches	Inches	Inches
Canadian	New Mexico	3.02	+0.21	0.32	-0,17
Rio Grande	Colorado	1.03	7,014	0.22	-0,22
Rio Grande (N)	New Mexico	1,63	-2.74	0.57	09*0-
Rio Grande (S)	New Mexico	1.89	-0.26	0.42	+0.02
Pecos	New Mexico	3.40	+0.63	0°59	-0.24

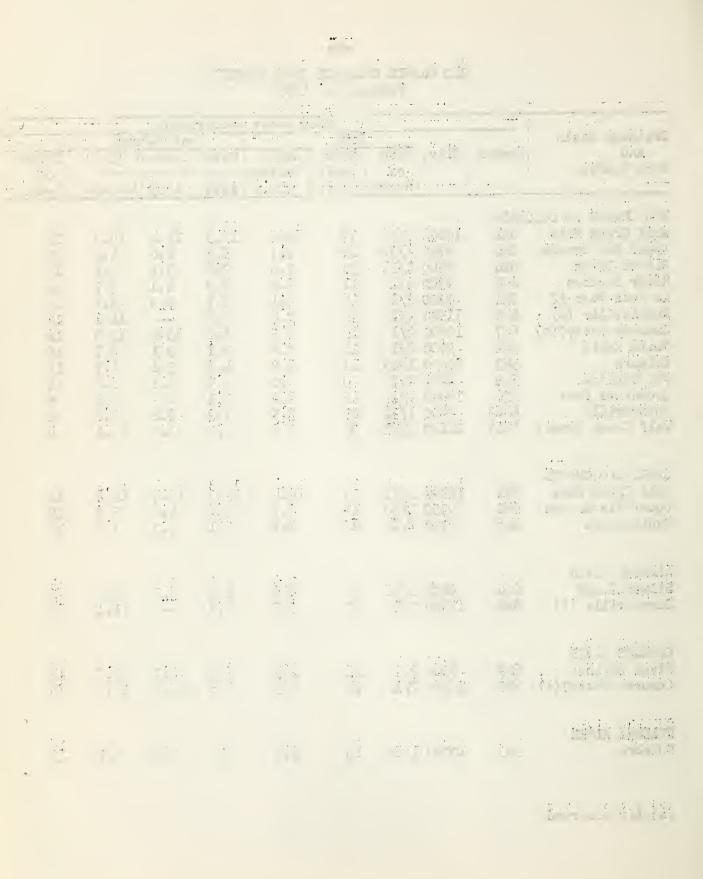
* Average of Selected High Elevation Stations



RIO GRANDE DRAINAGE SNOW SURVEYS
February 1, 1955

	1			C	0	36-2-22				
Ducinomo Bosin		,	1	1955	w Cover		emenus ast Rec	and		12
Drainage Basin and	Number	Elevo			List on			it (In.)	Year	
Snow Course	Manager.	Free	of	Snow	Water Content		Concer	10 (1116)	of	
Show Course			Survey	Depth (In.)	(In.)	1954	7053	Average	Reco	,
	<u> </u>		Durvey	(THO)	(TIIe)	1774	1700	werage	Tieco.	1 u
RIO GRANDE IN COLO	OTATO									
Wolf Creek Pass	6ML	10000	דב/ ד	38	10.4	13.3	14,4	14.2	15	
Upper Rio Grande			1/30	19	2.7	5.5	4.6	5.2	15	
Silver Lakes	6M4		1/31	30	2.6	2.6	3.7	4.5	15	
River Springs	6M5	9300		11	2.4	2,9	4.1	5.7	11	
La Veta Pass #2	5M1	9300		14	3.4	6.1	6.9	5.7	15	
Summitville (a)	6M6	11500		30	7.5	8.8		11.1	10	
Cumbres Pass#2(a)		10000		24	6.5	6.8	14.0		16	
Santa Maria	6M8	9700		14	2.9	3.1		3.7	16	
Culebra	5M3	10000		13	1.8	4.8	5.6	6.7	15	
Ft. Garland	5M4	8200		0	0.0	1.5	2.1	1.8	14	
Cochetopa Pass	6 L 6	10000		14	2.8	5.1	2.3	3.7	6	
Howardville	6N13		1/31	25	5.5	7.3	7.2	9,6	4	
Wolf Creek Summit		11100		36	9.0	9.9	13.9	19.1	Ĭ.	
			_,		, , ,	, . ,				
UPPER RIO GRANDE						į				
Wolf Creek Pass	6MI	10000	1/31	¹ 38	10.4	12,3	14.4	14,2	15	
Upper Rio Grande	6M2		1/30	19	2.7	5.5	4.6	5.2	15	
Santa Maria	6M8	9700	2/1	13	2.9	3.1	3.3	3.7	16	
ALAMOSA RIVER										
Silver Lakes	6ML		1/31	13	2,6	2.6	3.7	45	15	
Summitville (2)	614 6	11500	2/1	30	7.5	8.8		11,1	10	
				1						
CONEJOS RIVER			- 1-	1	- 1				- 1	
River Springs	6M5	9300		11	2.4	2.9	4.1	5.7	14	
Cumbres Pass#2(a)	6M7	10000	2/1	5/1	6.5	6.8	14.0	13.3	16	
										,
CULEBRA RIVER	e/ 0	30000	7 /00	7.0	2 0	1 0	~ /	6.7	7 ~	
Culebra	5M3	10000	.1/29	13	1,8	4.8	5.6	6.7	15	
										4

⁽a) Air observed



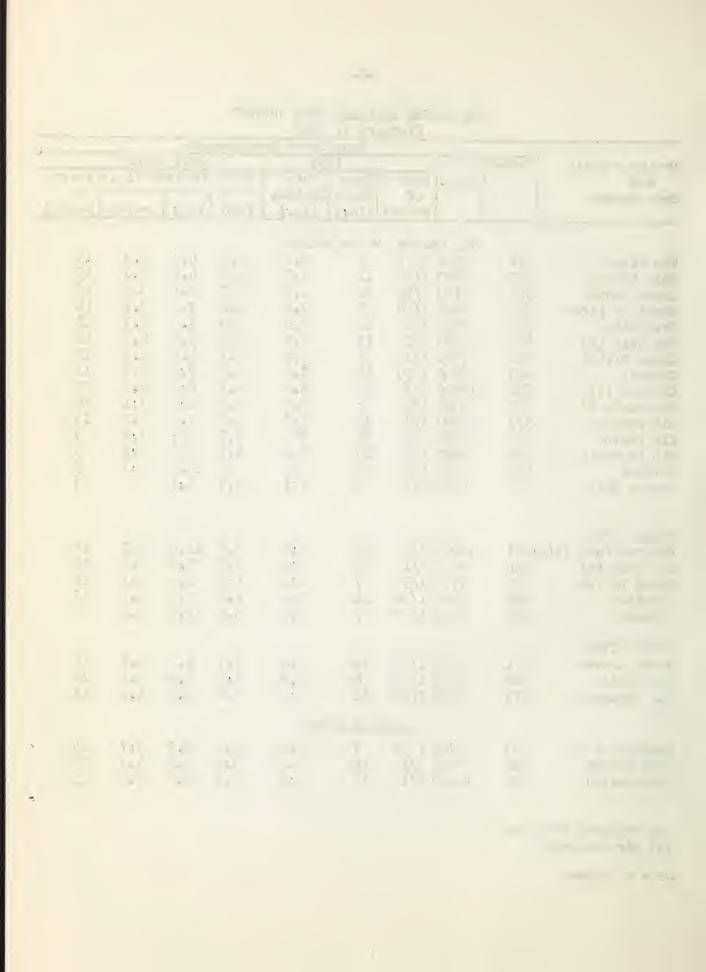
RIO GRANDE DRAINAGE SNOW SURVEYS

February 1, 1955

			rebrua	ary 1,					
					Cover Me	asurem			
Drainage Basin	Number				955			Record	
and		Elev.	Date	Snow	Water	Water	Conte	nt (In.)	
Snow Course			of		Content		1		of
			Survey	(In.)	(In.)	1954	1953	Average	Record
					•		•		
			RANDE II						
Red River	5N1		1/27	9	2.4	4.2	4.1	5.3	15
Taos Canyon	5N2		1/28	11	3.2	3.6	4.6	5.0	15
Aspen Grove	5Pl		1/29	10	1,8	2.7	4.1	3.8	16
Hematite Park*	5N3		1/28	7	2.0	4.0	3.9	3.7	14
Tres Ritos	5N4	9000		14	2.4	3.0	3.8	4.3	16
Pay Role (a)	6N1	9700		15	2.9	5.4	5.0	6.8	14
Chama Divide	6N2	7750	1/30	7	1.2	4.1	4.2	4.3	15
Chamita	6N3	8500	1/30	14	2.6	4.8	7.4	6.9	13
Cordova (a)	5N5	10100		15	3.0	5•7	6.6	6.9	13
Panchuela #2	5P2	8300	1/28	6	0.8	1.8	4.0	3.1	16
Big Tesuque	5P3	10000		12	2.1	3.0	1.2	4.1	13
Elk Cabin	5P4	8350	NS	NS	NS	3.1	2.7	2.6	7
Rio En Medio	5P5	10400	1/29	14	2.4	4.6	7.8	4.7	5
Bateman	6N4	9300	1/29	17	4.0	6.0	10.0	8.3	13 7 5 5
Fenton Hill	6P2	8900	2/1	9	1.1	2.3	4.1		3
CHAMA RIVER									
Cumbres Pass #2(a		10000		24	6.5	6.8	14.0	13.3	16
Pay Role (a)	6N1	9700	2/1	15	2.9	5.4	5.0	6.8	14
Chama Divide	6N2	7750	1/30	7	1.2	4.1	4.2	4.3	15
Chamita	6N3		1/30	14	2.6	4.8	7.4	6.9	13
Bateman	6N4	9300	1/29	17	4.0	6.0	10.0	8.3	5
PECOS RIVER									
Aspen Grove*	5P1		1/29	10	1.8	2.7	4.1	3.8	16
Panchuela	5P2	9200	1/28	6	0.8	1.8	4.0	3.1	16
Big Tesuque*	5 P 3	9000	1/29	12	2.1	3.0	1.2	4.1	13
			CANAD	IAN RIV	ÆR				
Hematite Park	5N3	9500	1,/28	7	2.0	4.0	3.9	3.7	14
Tres Ritos*	5N4	9000		14	2.4	3.0	3.8	4.3	16
Cordova*(a)	5N5	10100		15	3.0	5.7	6.6	6.9	13
			•						

^{*}On adjacent drainage
(a) Air observed

NS - No Survey

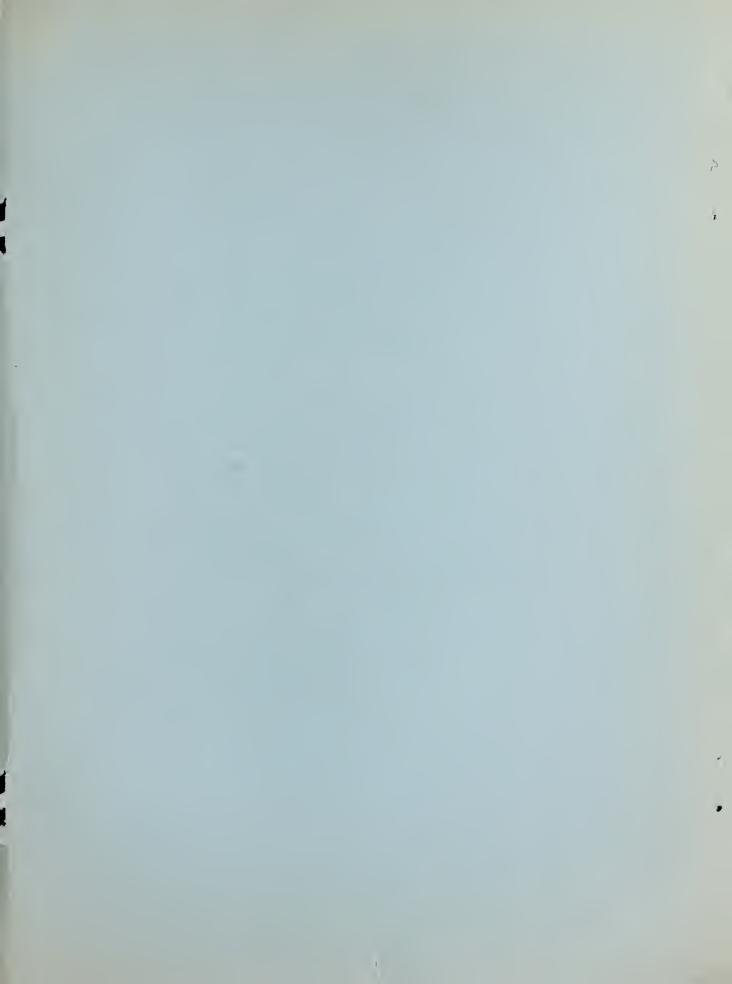


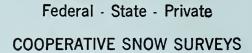
LIST AND LOCATION OF SNOW COURSES Platte, Arkansas, Colorade and Rio Grande Drainages

	900	State		Sec.	Twp.	Rge.	Elev.	1	No.	State	Name	Sec.	Twp.	Rge.	Elev.
			Cheyenne								Upper Colorado		•		
	3E1	SD	Upper Spearfish	21	3N	1E	6500		5J 4	C	Phantom Valley	7	5N	7 5W	9300
									5K3	C	Berthoud Pass	35	28	75W	9700
			North Platte						5K4	С	M.F. Camp Ground	16	3S	77W	9000
1	6J2	C	Park View	24	5N	78W	9200		6K5	С	Fiddler Guloh	1	8S	80W	11000
1	6J3	C	Columbine	21	5N	82W	9300		5J 7 6J 5	C C	Lulu Willow Creek Pass	25 1	6N 4N	76W 78W	10200 9500
	6J7	C	Northgate	7	11N	79W	8500		5J 9	C	N. Inlet Grand Lake	26	4N	75W	9000
1	6H4 6H5	W	No. French Creek	27	16N	809	10200		5J10	C	Lake Irene	8	5N	7 5W	10600
1	6H6	W	No. Barrett Creek Ryan Park	30 3 4	16N 16N	80W 81W	9400 8400		5K6	C	Arrow	34	18	7 5W	9900
	6H7	W	Spring Creek	32	15N	8.5W	9000		5K7	C	Lapland	16	28	76W	9500
	6H8	W	Bottle Creek	24	14N	8.57	8200	6	5K8	C	Fremont Pass	2	88	76W	11400
	6H9	W	Webber Springs	27	14N	85W	9000		6J 6	C	Lynx Pass	27	2N	8 8W	91.00
	6H10	₩	Old Battle	29	14N	8.5W	9800		5K9		Shrine Pass	15	6S	79W	10500
	6H11	W	Albany	18	14N	78W	9400		5K9	C	Grizzly Peak Glen-Mer Ranch	2 31	5S 2S	76N 77N	11250 8850
T	6H13	W	Pearl	18	12N	82W	8900		5K10 5J14		Monaroh Lake	30	2N	74W	8500
			V =						5316	C	Granby	11	2N	77W	8700
	C130	0	Laramie	E	3.01	77W	0000		5J19	C	Grand Lake	36	4N	7 5N	8600
	5J12 5J15	C	Roach McIntyre	5 35	10N 10N	76W	9800 9 100	5	5K14	C	Berthoud Summit	10	28	75W	11300
	6H1	W	Brooklyn Lake	11	16N	78W	10200	5	5K15	C	Frazer View	34	2S	75W	10600
	6H2	W	Hairpin Turn	24	16N	7 9W	9500		5J11		Gore Pass	2	lN	82W	8900
	6H3	W	Libby Lodge	29	16N	78W	8900		5K13	С	Frisou	18	6S	78W	9300
	6412	W	Fox Park	21	13N	78W	9200		5K16		Snake River	9	5S	76W	9700
									5K14 5J24		Summit Ranch Milner Pass	8 7	4S 5N	78N 75W	10000
	00-	705	Sweetwater	2.00	7.01	3.6.3	0000		SK15		Vail Pass	28	5S	7 9W	10100
	8G3		South Pass	13	30N	101W	9000		5K18		Kokozo	23	78	79W	10600
	8G4 9G6	W	Grannier Meadows Larsen Creek	19 12	30N 30N	100W 103W	9000 9000		5K19		Pando	10	78	WOS	9500
	300	44	Darsen Creek	12	SUN	10011	9000								
1			Laramie Peaks Distri	et							Roaring Fork				
ı	5G1	₩	Boxelder	11	27N	74W	8450		SK4	C	Ind. Pass Tunnel	3	118	82W	10700
П	5G2	W	LaBonte	31	30N	75W	9000		7K1		North Lost Trail	21	118	87W	9200
									SK6		Nast	1	98	83W	8700
			South Platte						SKIO		Ivanhoe	12	98	82W	10400
	511		Cameron Pass	2	6N	76W	10300	C	5K12	С	Ruby	1	128	83W	11500
5 55	532		Chambers lake	6	7N	7 5N	9000				Yampa				
6.0	513	C	Big South	33 2	8N	7 5N	8600	6	3J1	С	Dry Lake	26	7N	84W	8300
1 55	5K1		East Portal Hoosier Pass	13	2S 8S	74W 78W	9400 11400		3J 4		Elk River	21	5N	8 ZW	9300
177	5K2	C	Fairpley	33	98	77W	10000	6	3J8	С	Routt Line	13	5N	83W	9700
	515		Wild Basin	24	3 N	7 4VI	10000	6	3119	С	Rabbit Ears	30	5N	83W	9550
	516		Deadman Hill	26	101	7 5%	10200	е	3J10	С	Yampa View	21	5N	84W	8500
П	5J8	C	University Camp	26	1N	73W	10300				187) -2 4 -				
	5K5		Loveland Fass	27	4 S	76W	10600	9	7K2	С	White Burro Mountain	2.0	90	0.318	0000
	6111		Hour Glass Lake	18	7N	73W	9500		7J1		Rio Blanco	15 28	2S 1N	91W 88W	9000 8500
	5K8		Jefferson Creek	14	7S	76W	10100	·		Ü	ATO DESIGO	20	TH	000	0000
	5013 5017	C	Hidden Valley Deer Ridge	23 19	5N 5N	7 5W 7 3W	9550 9050				Piateau Creek				
- 601	5118		Copeland Lake	21	3N	73W	8600	7	7K4	C	Mess Lakes	35	118	96W	10000
	5K10		Empire	21	3 S	75W	9650	7	7K5	C	Trickle Divide	23	118	94W	10000
- 1	5K11		Geneve Fark	18	6 S	74W	9750								
	5L1		Antero	1	138	77W	9200		CIR		Guntison	0.0	3 6 0	12.00	0000
-1	21 S.C		Red Feather	26	101	74W	9000		SL2		Crested Butte	22	138	36W	9000
	5K12		Moffett	2	28	74Vi	9400		7K3		Park Cono Alexander Lake	19	14S 12S	8 <i>2W</i> 25W	9700 10000
-	5/21		Ward	1	1N	73W	9500		71.1		Snowshoe Wese	14	138	89N	7500
- 10	5K1%	C	Berthoud Fells	16	3S	75W	10800		7 M6		Ironton Park	29	43N	7N	9800
_	5J 23 5J 23	C	Longs Feak Lost Lake	32 32	4N 8N	73W 75W	10500 9300		7K6		Park Reservoir	34	113	94₩	9500
	5K17		Clear Creek	27	48	76W	11200		3L3		Porphyry Creek	19	49N		10801
	5,125	C	Boulder Falls	26	1N	73%	10000	7	7K7	C	Kannah Creok	5	128	9 .3W	10700
	5J 26		Two Mile	22	5N	74W	10500		71/18		Lake City	13	43N	4#	10300
	5H1	W	Pole Mountain	35	15N	7.2W	8700		788		McClure Pass	1	118	89W	9500
1								7	761.5	C	Red Mountain	13	45M	8W	11000
			Arkansas								San Juan				
	3K2	C	Tennessee Pass	21	88	80W	10200	6	3MS	С	Upper San Juan	10	37N	12	10000
	3K3	C	Twin Lakes Tunnel	22	118	82W	10500		714		Silvertes	10	411	TH	9400
-	3K7	C	LaVeta Pass Four Mile Park	22 23	28S	70W 81W	9300 9 7 00		7145		Cascade	12	39N	SW	8850
-	M2	c	Blue Lakes	30	318	69W	10000		7M7		Granite Peaks	25	37N	6W	7950
	3LA	C	Monarch Pass	16	49N	6E	10500		7M10		La Plate	St.	36N	7.380	9700
	3L5	C	Saint Elmo	31	158	BOW	10600		Mil		Spud Mountain	32	NOA		10700
1	3211	С	Timberline	8	98	81%	11100		7M12		Molas Lake	7	A 0 18	770	10500
	3816	С	Cooper Hill	2	88	80W	10600		7M13		Howardvillo	1.5	418	7W	9800
	8X17	C	East Fork	9	8G	79%	10700	7	7N14	С	Mineral Creek	35	42N	8₩	10300
1	OLZ	C	Westoliffe	19	225	73W	9000								
100															

LIST AND LOCATION OF SNOW COURSES (CONTINUED)

							(001112111	,				
No.	State	Name	Sec.	Twp.	Rge.	Elev.	No.	State	Name	Sec.	Two	Rees	Elev.
				•	J						2 p 0	w.Po.	77040
		Doloros							Gila (Arizona)	Contin	ued		
7101	C	Rico	11	39N	11W	8700	8S 2	HM	Inman	6	118	10W	7800
7102	C	Telluride	6	42N	SW	8600	984	A	Nutrioso	23	6N	30E	8500
7113	c	Lizzard Head	24	41N	100	10300	956	A	Beaver Head	13	4N	30E	8000
71(9	C	Trout Lake	8	41N	SW	9700	957	A	Coronado Trail	26	5N	30E	8000
4 01.0	•	II Out Bale		TIM	on	3700	1072	Ā	Rose Canyon	15	125	16E	7300
		Green					1071	A	Bear Wallow	6	125	16E	8100
9G1	W	Mulligen Perk	17	2 (3)	108W	8900	1011	4.	Dom Hallow	0	120	100	0100
9G 5	W	Dutch Joe	35			8700			Salt (Arizona)				
10F15	W	Kendall R.S.			104W		9R2	A	MoNary	14	8N	225	7900
10F16	W	Locais Park	23		110W	7900	10R6	A	Forest Dale	2		23E	7290
1069	M		14		11IW	8500	9R1	A	Milk Ranch	28	9N	218	601
		Snyder Basin R.S.	15		114W	8040	98.5	A			8N	23E	700
10G10	W	Piney LaBarge	19	29M	114W	8820	9R5	A	Pacheto	Maveri			7800
		TEU A LE					981	A	Fort Apache	18	7N	278	901
		UTAH Pinan Cara		TF1 - 1-			9S 2	A	Baldy	28	7N	27E	9060
10J4	U	Upper Green Rive			170	0500	1051	A	Maverick Fork	13	6N	27E	9050
1011	Ū	Howinta Ranger Static		3N	13E	9500	1001	n	Workman Creek	33	6N	14E	5860
1012	U	Hole-in-the-Rock	13	2N	15E	9150			74443 - 0-33	- / 1 2 -			
	_	Middle Beaver Creek	31	3N	16E	8550	10P2	A	Little Colored		-	an.	777 70
1033	Ū	Hole-in-the-Rook R.S.		3N	16E	8300		A	Fort Valley	22	22N	6E	7350
9J1	Ū	Kings Cabin (Upper)	22	18	21E	8800	11R4		Mormon Lake	13	18N	8E	7350
9J2	Ū	Kings Cabin (Lower)	23&26	3 1S	21E	8600	11R3	A	Mormon Mountain	14	18N	8E	7500
		Decelor of Discourse							Vande (And	1			
1019	75	Duchesne River	-	0.0	073	0000	2.602	6	Verde (Arizona		3 637	C	CHAA
1018	Ū	Trail Lake	5	25	32	9800	12R1	A	Camp Wood	3	16N	6W	5700
11J23	Ü	Daniels-Strawberry S.		28	12₩	8000	11P3	A	Antelope Park	29	19N	SE OF	7300
1118	U		34-38		6E	8000	11R2	A	Casner Park	19	18N	8E	6930
1117	U	East Portal	36	73	6E	7560	11R1	A	Munds Park	7	18N	7E	6500
10K1	Ū	Indian Canyon	2	118	10E	9100			wanna (,			
10J9	U	Brown Duck Lake	5	2N	6W	10300	2000		Williams (Ariz	-			
10J10	Ū	Lakefork Mountain	2&3	SN	5W	10500	12R2	A	Iron Springs	22	14N	3₩	6000
10111	ਚ	Lakefork Mountain #2	17	SM	491	8900	13P1	A	Willow Ranoh	16	21N	11W	5000
10112	Ū	Lakefork Mountain 43	29	SM	401	8100	2002		Lower Colorado		-		
913	U	Paradise Park	7	3N	1E	10500	12P1	A	Chalendar	27	228	3E	7100
9J 5	Ū	Mosby Mountain (lower) 5	2N	1E	9500	1171	A	Grand Canyon	21	3 ON	4E	7500
							12N1	A	Bright Angel	34	33N	4E	8400
		Price River		- 1-	-		02/79			olorado		-77	
1185	Ū	Huntington-Horseshee	12	148	5E	9800	6M1	C	Wolf Creek Pass	4	37N	SE	10000
11K4	U	Gooseberry Reservoir		138	5E	8700	6W2	C	Upper Rio Grande	13	40N	4W	9350
11K3	U		13-28	138	5E	8800	6M4	C	Silver Lakes	15	36N	5E	9600
		Cottenwood Cr.			-		6M5	C	River Springs	25	33N	6E	9300
1186	U	Mud Creek	4	148	7E	8250	6M8	C	Summitville	30	37N		11500
1187	Ū	Staley Ranch	32	123	7E	7600	6M7	С	Cumbres Pass	17	32N	5E	10000
11K8	IJ	Dry Valley Divide	20	125	8E	7800	6M8	C	Santa Maria	8	41N	2W	9700
							5M3	C			.05.2W		10000
		San Rafael River					5M4	C	Fort Garland	13	29N	7 2W	8200
1110	Ū	Seeley Creek RS #2	25	178	48	10000	6119	C	Platoro	22	36N	477	9950
							6M10	C	West Conejos	25	3 5N	4E	9450
		Muddy River					6M11	C	LaManga	11	33N		10000
11K14	U	Black Fork	34	20S	4E	9200	6M12	C	Pyramid	26	41N		10300
11K15	Ū	Dills Camp	27	208	4E	9200	6N13	C	Spring Creek Pass	2	42N		10900
							6M14	C	Pool Table Mt.	19	41N		10000
		Fremont River					6M15	C	Lake Humphrey	32	40N	1E	9300
1113	Ū	Fish Lake	35	26S	1E	8700	6L6	C	Cochetopa Pass	12	45N		10000
11L4	ū	Black's Flat-U.M.Cr.	33	245	3E	9250	6M16	C	Poroupine	2	41N		10400
11L5	σ	Donkey Reservoir	9	30S	4E	9800	6M17	С	Wolf Creek Summit	6	37N	2E	11000
		70 7 4 74					£279	2724	Rio Grande (Ne			3 670	DECO
		Escalante River			-		5N1	NM	Red River	29		15E	9500
11M1	U	Widtsoe-Escalante Sum		348	1 W	9500	5N2	NM	Taos Canyon	10	25N	15E	9000
11M2	Ū	Widtsoe-Escalante #2	22	34S	1W	9500	5P1	NM	Aspen Grove	12		10E	910
							5N3	NM	Hematite Park	8		15E	950
		Virgin River					5N4	MM	Tres Ritos	23		13E	9000
12M6	U	Long Valley Jct	22	385	6W	7500	6N1	NM	Payrole Chara Dirida	J.6		7E	970
12M5	U	Harris Flat R.S.	24	388	7W	7 7 00	6N2	NM		6.9N	106.7		775
12M4	U	Duok Creek R.S.	11	388	8W	8500	6N3	NM		Ke.8	106.7		8500
12M2	Ū	Midway Valley	26	3 7 S	9W	9400	5N 5	NM	Cordova	22			10100
12M1	Ū	Cedar Breaks	2	37S	9W	10390	5P2	NM	Panohuela	27		12E	8300
12M3	σ	Webster Flat	20	378	9W	9200	5P3	NM	Big Tesuque	17	18N		10000
13M1	Ū	Pine Valley	3	40S	15W	9150	5P4	NM	Elk Cabin	8	18N	11E	8250
		Lower Colorado R				ern Utah)	5P5	NM	Rio En Medio	8	18N		10400
9L1	Ū	LaSal Hountain	5	27S	24E	8800	6P1	NM	Quemazon	34	20N	5E	9300
9M1	Ū	Buokboard Flat	36	338	SSE	9000	6N4	NM	Bateman	5	26N	6E	9300
		Gila (Arizona)					6P2	MM	Fenton Hill	18	19N	3W	8900
751	NM	Frisco Divide	21	6S	SOM	8000							
7S2	NM	State Line	5	6 S	21W	8000							
881	NM	Taylor Creek	20	108	10W	7850							





Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"